

# Abortion Training in U.S. Obstetrics And Gynecology Residency Programs, 1998

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**Context:** Since the late 1970s, the number of obstetrics and gynecology residency programs providing abortion training in the United States has steadily decreased. Given the documented shortage of abortion providers, assessing and ensuring the availability of abortion training in graduate medical education is critical.

**Methods:** In 1998, the National Abortion Federation surveyed the 261 accredited U.S. residency programs in obstetrics and gynecology, and analyzed the availability of first- and second-trimester abortion training.

**Results:** Of the 179 programs that responded to the survey, 81% reported that they offer first-trimester abortion training—46% routinely and 34% as an elective. Seventy-four percent of programs offer second-trimester training—44% routinely and 29% as an elective. Some programs that do not offer training give residents the option of obtaining it elsewhere. While 26% of programs indicated that all residents in their programs receive abortion training, 40% said that fewer than half are trained, including 14% that train no residents. The operating room is the most common training site: Fifty-nine percent of programs reported that abortion training takes place in the operating room.

**Conclusions:** After a decades-long decline in the availability of abortion training, opportunities for abortion training have increased. However, there is reason to be cautious in interpreting these results, including possible response bias and pressure to report the availability of abortion training because of new guidelines from the Accreditation Council for Graduate Medical Education.

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Since the late 1970s, the number of obstetrics and gynecology residency programs in the United States that offer abortion training has dropped steadily.<sup>1</sup> For example, a 1978 study revealed that 26% of programs required residents to perform first-trimester abortion procedures.<sup>2</sup> By 1995, only 12% of programs were providing routine abortion training.<sup>3</sup>

Residency programs face many obstacles in providing abortion training. Unlike

many other procedures that obstetrician-gynecologists perform, the majority of abortions (91%) in the United States take place in abortion or other types of clinics;\* only 7% are provided in hospitals, and that proportion is declining.<sup>4</sup> Thus, residency programs that rely solely upon abortion patient volume in hospitals may have difficulty providing adequate training in the procedure.<sup>5</sup>

Some programs provide access to abor-

tion training by allowing residents to seek optional training at a local abortion care facility, but overworked residents are unlikely to take advantage of these opportunities.<sup>6</sup> Residents in obstetrics and gynecology work an average of 80 hours per week and are on call two nights every week.<sup>7</sup> When given a choice, some residents may refuse to perform abortions as a way of exercising control over their own schedules and not because they oppose abortion for moral reasons.<sup>8</sup>

Low rates of abortion training could pose a significant public health problem. Responding to the precipitous decline in abortion training, the Accreditation Council for Graduate Medical Education (ACGME) instituted explicit requirements for the inclusion of abortion training as a standard part of obstetrics and gynecology residency education beginning in January 1996.<sup>†</sup> The current study was designed to assess whether the availability of abortion training in residency programs has changed since the ACGME guidelines took effect.

## Methodology

To assess the availability of abortion training, in May 1998, the National Abortion Federation (NAF) mailed a survey to directors of all 267 accredited obstetrics and gynecology residency programs listed in the American Medical Association's (AMA's) *Graduate Medical Education Directory, 1997–1998*. The survey contained nine closed-ended, multiple-choice questions and three open-ended questions. Respon-

\*"Other" settings may be group practices or other facilities with clinic names, surgical centers, health maintenance organizations and family planning clinics (source: reference 4).

†The guidelines read as follows: "No program or resident with a religious or moral objection shall be required to provide training in or to perform induced abortions. Otherwise, access to experience with induced abortion must be part of residency education. This education can be provided outside the institution. Experience with management of complications of abortion must be provided to all residents. If a residency program has a religious, moral, or legal restriction that prohibits the resi-

dents from performing abortions within the institution, the program must ensure that the residents receive satisfactory education and experience in managing the complications of abortion. Furthermore, such residency programs (1) must not impede residents in the programs who do not have religious or moral objections from receiving education and experience in performing abortions at another institution and (2) must publicize such policy to all applicants to those residency programs." (Source: American Medical Association [AMA], Program requirements for residency education in obstetrics and gynecology, in: *Graduate Medical Education Directory 1997–1998*, Atlanta: AMA, 1998, p. 143.)

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dents were asked to report whether their programs offer first- and second-trimester abortion training; if they said that such training is offered, they were asked whether it is "a routine part of training or an elective." Directors of programs that do not offer abortion training were asked if there is "a system in place" for their residents to go elsewhere for training. They were also asked to estimate the number of residents who receive abortion training each year and to indicate the settings in which such training takes place (hospital operating room, hospital ambulatory surgery department, hospital clinic, local independent clinic or other setting).

In July 1998, NAF mailed follow-up surveys to nonrespondents, using updated information from the AMA's *Graduate Medical Education Directory, 1998-1999*, which listed 261 residency programs. (With the start of the academic year in July, some residency programs had gained or lost accreditation, merged, changed their names or named new directors.) None of the programs that were excluded from the new directory had replied to the mailing in May. In mid-August, NAF faxed or e-mailed another copy of the survey to nonrespondents. The last attempt to reach nonresponding programs was made by telephone and fax in December 1998. Because the initial plan was to make program information available to medical students committed to accessing abortion training in their residencies, the first two

**Table 1. Percentage distribution of obstetrics and gynecology residency programs surveyed, by selected characteristics, 1998 (N=179)**

| Characteristic           | %          |
|--------------------------|------------|
| <b>Size</b>              |            |
| Small                    | 35         |
| Medium                   | 47         |
| Large                    | 18         |
| <b>Geographic region</b> |            |
| New England              | 4          |
| Mid-Atlantic             | 28         |
| South Atlantic           | 19         |
| East North Central       | 18         |
| East South Central       | 4          |
| West North Central       | 4          |
| West South Central       | 8          |
| Mountain                 | 4          |
| Pacific                  | 11         |
| <b>Affiliation</b>       |            |
| Public                   | 30         |
| Private, non-church      | 58         |
| Private, church          | 10         |
| Military                 | 3          |
| <b>Total</b>             | <b>100</b> |

Note: In all categories, respondents were representative of the survey universe.

mailings did not include the option of confidentiality. However, in an effort to raise the response rate, NAF offered confidentiality to those who requested it in the third and fourth attempts to survey nonresponding programs.

We divided the residency programs into categories based on size, geographic region and affiliation. Using information from the updated AMA directory on the total number of residents in each program, we classified programs as small (those with 2-14 residents), medium (15-25) or large (26-56). Regional categories matched the geographic zones used in past surveys on this topic.\* The affiliation of the residency program (public; private, non-church-operated; private, church-operated; or military) was determined by its sponsoring institution, as listed in the *American Hospital Association Guide, 1998-1999*. The majority of the statistical analyses were conducted with SPSS Version 8.0.

## Results

### Program Characteristics

A total of 179 program directors returned the survey, yielding a response rate of 69%. (Two programs sent back the survey but did not answer any of the questions; these were included as nonrespondents.) Respondents are representative of all programs in terms of their size, geographic region and hospital affiliation. Programs that responded to the survey are predominantly small or medium in size; only 18% have more than 25 residents (Table 1). They are concentrated in the Mid-Atlantic (28%), South Atlantic (19%) and East North Central (18%) regions. The largest proportion of programs are private and have no church affiliation (58%); most of the rest are in public institutions (30%).

### First-Trimester Abortion Training

In all, 81% of programs that responded to the survey reported offering first-trimester abortion training, and another 12% have a system in place for residents to obtain training elsewhere; the remaining 7% provide residents with no opportunity to train in abortion (Table 2). Forty-six percent of respondents reported that first-trimester abortion training is routine in their programs, and 34% indicated that it is elec-

**Table 2. Percentage distribution of obstetrics and gynecology residency programs, by availability of abortion training, according to type of program**

| Characteristic          | All programs | Public     | Private, non-church | Private, church | Military   |
|-------------------------|--------------|------------|---------------------|-----------------|------------|
| <b>First-trimester</b>  | (N=179)      | (N=53)     | (N=104)             | (N=17)          | (N=5)      |
| Offered in program**    | 81           | 91         | 89                  | 18              | 20         |
| Available elsewhere     | 12           | 4          | 9                   | 47              | 40         |
| Not available           | 7            | 6          | 2                   | 35              | 40         |
| <b>Second-trimester</b> | (N=171)†     | (N=50)     | (N=100)†            | (N=16)          | (N=5)      |
| Offered in program**    | 74           | 88         | 80                  | 13              | 20         |
| Available elsewhere     | 14           | 8          | 11                  | 44              | 40         |
| Not available           | 10           | 4          | 6                   | 44              | 40         |
| <b>Total</b>            | <b>100</b>   | <b>100</b> | <b>100</b>          | <b>100</b>      | <b>100</b> |

\*\*Differences between program types are statistically significant at p<.001. †Percentages do not add to 100 because some respondents did not indicate whether training is offered in the program or is available elsewhere.

tive; 1% did not indicate whether training is routine or elective (not shown).

A program's size and geographic location are not significantly associated with whether it offers first-trimester abortion training, but its affiliation has a significant impact (Table 2). Some 91% of residency programs affiliated with public facilities and 89% of those affiliated with private, non-church-operated hospitals offer first-trimester training, compared with 20% of military programs and 18% of private, church-operated programs ( $\chi^2=64.384$ , p<.001). None of the program characteristics affected whether first-trimester training is routine or elective.

Of the 13 programs that neither offer first-trimester abortion training nor give residents the option of training elsewhere, six are private, church-operated institutions; three are public programs; and two each are private, non-church-affiliated and military.

### Second-Trimester Abortion Training

Of the 171 respondents who provided information on training in second-trimester abortion, 74% reported that such training

\*The regional categories correspond to census divisions: New England (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont), Mid-Atlantic (New Jersey, New York and Pennsylvania), South Atlantic (Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, Puerto Rico, South Carolina, Virginia and West Virginia), East North Central (Illinois, Indiana, Michigan, Ohio and Wisconsin), East South Central (Alabama, Kentucky, Mississippi and Tennessee), West North Central (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota and South Dakota), West South Central (Arkansas, Louisiana, Oklahoma and Texas), Mountain (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah and Wyoming) and Pacific (California, Hawaii, Alaska, Oregon and Washington). It is unclear whether Puerto Rican programs were included in earlier surveys.

**Table 3. Percentage distribution of obstetrics and gynecology residency programs, by percentage of residents who receive abortion training, according to type of program (N=164)**

| % of residents trained | All programs | Public | Private, non-church | Private, church | Military |
|------------------------|--------------|--------|---------------------|-----------------|----------|
| 100                    | 26           | 28     | 27                  | 19              | 25       |
| 50-99                  | 34           | 46     | 35                  | 6               | 0        |
| 1-49                   | 26           | 17     | 31                  | 19              | 25       |
| 0                      | 14           | 9      | 8                   | 56              | 50       |
| Total                  | 100          | 100    | 100                 | 100             | 100      |

Note: Includes training provided by the program or at another facility.

is offered in their programs—a slightly lower proportion than reported offering first-trimester abortion training (Table 2). Fourteen percent have arrangements for residents to receive training elsewhere, and 10% have no mechanism for providing training; 2% of respondents said that training is available, but did not indicate whether it is offered in the program or elsewhere. Training in second-trimester abortion is offered routinely in 44% of programs and is an elective in 29%; whether it is elective or routine is unknown for 1% of programs.

As in the case of first-trimester abortion training, the only program characteristic that is significantly associated with whether a program offers training in second-trimester abortion is affiliation. Whereas 88% of public programs and 80% of private, non-church-operated programs offer second-trimester training, considerably smaller proportions (20% and 13%, respectively) of military and private, church-operated programs do so ( $\chi^2=46.302, p<.001$ ). The size, geographic region and hospital affiliation of a residency program have no effect on whether its second-trimester training is routine or elective. These factors also are not significantly associated with a program's failure to provide residents with access to second-trimester training.

**Residents' Participation in Training**

When asked to approximate the number of residents participating in abortion training, 164 program directors provided an estimate. Of these, 26% reported that all of their residents are trained, 34% that 50-99% of their residents are trained, 26% that 1-49% are trained and 14% that none of their residents are trained (Table 3).

On the basis of the information on program size reported in the 1998-1999 AMA directory, we calculated that 84% of obstetrics and gynecology residents are enrolled in programs that offer first-trimester abortion training, and 49% are in programs that offer such training routinely.

Seventy-four percent of residents are in programs that offer second-trimester training, and 45% are in programs with routine training in this area.

Programs that offer abortion training reported a higher proportion of residents trained than did programs with a system in place for residents to receive training elsewhere (Table 4). Only 28% of directors of programs that offer on-site first-trimester abortion training reported that fewer than half of residents participate in training. In contrast, 80% of programs in which residents must travel to alternate sites reported that fewer than half of their residents are trained. Similarly, 24% of programs that offer second-trimester training reported that fewer than half of their residents obtained training, compared with 86% of programs where residents must go elsewhere.

To examine the importance of the residency program's policies on abortion training, we compared the 66 programs that reported routinely offering both first- and second-trimester abortion training with the 49 programs that reported offering both types of training on an elective basis. Programs with routine training in both trimesters were more likely to report that half or more of their residents are trained (83%) than were programs with elective training in both (50%).

**Early vs. Late Responders**

To evaluate the likelihood of reporting bias, we compared the responses from programs that responded to the first two mailings and the responses from programs that responded to the last two mailings (Table 5). Early responders were more likely to offer routine first-trimester training (61% of those responding in May and 52% of those responding in July) than were late responders (23% and 33% in August and December, respectively), and the difference was statistically significant ( $\chi^2=12.18, p<.01$ ). A similar pattern was evident for second-trimester abortion, but the difference was not statistically significant.

Early responders were also more likely than later responders to train the majority of their res-

idents (not shown). Nearly 40% of the programs that responded in May train all of their residents, and just 9% said that none of their residents are trained. By contrast, among December respondents, only about 20% train all of their residents, and nearly 25% train no residents.

**Training Location**

When asked to specify all of the locations where abortion training occurs, 155 directors responded. Of these, 59% reported that abortion training takes place in the hospital's operating room, 37% in the hospital's ambulatory surgery department, 34% in local independent clinics, 19% in the hospital's clinic and 9% in other locations. Of the 14 respondents who marked "other," six indicated that training occurs in "labor and delivery." Nearly three in 10 reported that training occurs exclusively in the operating room.

**Respondents' Comments**

At the end of the survey, respondents were invited to provide additional comments or pertinent information about their program's policies regarding abortion training. Seventy-one respondents offered additional comments, mostly concerning the conditions under which training occurs. Eighteen stressed that residents can always opt out of abortion training for moral or religious reasons. The following comment from a director whose program offers routine abortion training was typical: "Though offered as part of the regular gyn rotation, abortion training is considered optional, and any resident who has an objection is excused from participation."

Eighteen program directors specified that "elective abortions" are not performed in their programs. The following quote from a program with "elective" training was representative: "Please note training is voluntary and limited to patients with medical indications. We do not do elective terminations at any age of gestation, but if residents desire this, we refer them to a

**Table 4. Percentage distribution of obstetrics and gynecology residency programs that offer abortion training, by percentage of residents who receive such training, according to where training takes place**

| % of residents trained | First-trimester    |                  | Second-trimester   |                  |
|------------------------|--------------------|------------------|--------------------|------------------|
|                        | In program (N=132) | Elsewhere (N=20) | In program (N=118) | Elsewhere (N=22) |
| 100                    | 31                 | 10               | 34                 | 5                |
| 50-99                  | 41                 | 10               | 42                 | 9                |
| 1-49                   | 25                 | 45               | 21                 | 50               |
| 0                      | 3                  | 35               | 3                  | 36               |
| Total                  | 100                | 100              | 100                | 100              |

**Table 5. Percentage of obstetrics and gynecology residency programs, by availability of abortion training, according to timing of response to survey**

| Training availability   | Early      |             | Late          |                 |
|-------------------------|------------|-------------|---------------|-----------------|
|                         | May (N=54) | July (N=52) | August (N=22) | December (N=51) |
| <b>First-trimester</b>  |            |             |               |                 |
| Offer training          | 81         | 90          | 82            | 71              |
| Training is routine*    | 61         | 52          | 23            | 33              |
| Training not available  | 4          | 4           | 5             | 16              |
| <b>Second-trimester</b> |            |             |               |                 |
| Offer training          | 78         | 79          | 68            | 57              |
| Training is routine     | 56         | 48          | 23            | 29              |
| Training not available  | 4          | 8           | 14            | 16              |

\*Difference between early and late is statistically significant at  $p < .01$ .

center which performs elective abortions.”

Ten respondents labeled their institutions in a particular way (e.g., military, Catholic and “conservative community”) to explain the reasoning behind their policies regarding abortion training. Eight programs indicated that even though they provide the opportunity to train, most residents do not participate.

Six respondents pointed out that very few abortions occur in hospitals because of the expense, and that this low volume makes it difficult to train residents adequately. Three directors specifically requested that we keep their programs’ activities confidential, and two commented that they are supportive of abortion training. One respondent wrote about the “need to work on resident awareness about what happened to women before abortion was legal.”

## Discussion

Our results document a shift toward routine abortion training. A 1991–1992 study found that 70% of residency programs of-

fered abortion training, and 12% provided it routinely.<sup>9</sup> In our study, 81% of programs reported offering first-trimester training, and 46% reported doing so routinely. Similarly, in 1991–1992, 66% of residency programs reported offering second-trimester training,<sup>10</sup> while our study shows an increase to 74%. The rise in routine second-trimester training is particularly dramatic: from 7% in 1991–1992 to 44% in our survey. Our finding that programs reporting optional abortion training have lower levels of resident participation than programs that offer training routinely supports the results of previous research.<sup>11</sup>

### Study Limitations

Taking our results at face value, it would be simple to conclude that routine abortion training opportunities have skyrocketed. However, there is reason to be cautious in interpreting the results because of several potentially important factors: response bias, variability in respondents’ interpretations of survey questions and reporting bias.

The 1991–1992 study had a response rate of 87%;<sup>12</sup> by comparison, ours had a response rate of 69%. A response bias very probably exists among this smaller pool of respondents. Furthermore, although respondents are demographically similar to the survey universe, the analysis of early and late responders uncovers the need for caution in generalizing the findings to all residency programs. The programs that responded to our first request for information reported greater availability of routine first-trimester training and higher resident participation rates than programs that were contacted several times before they returned completed surveys. Assuming that nonrespondents are similar to late responders, the pool of respondents may represent a self-selected sample, with a bias toward reporting routine training.

Because of the likelihood of response bias, it is difficult to make assumptions about nonrespondents and we have not attempted to generalize our findings to the survey universe. The usual statistical assumption that the same proportion of nonrespondents as of responding programs offer routine training (46%) would most like-

ly be an overestimate, given the difference in availability of training between early and late responders. However, if we assume that all nonrespondents (i.e., 31% of the survey universe) do not offer routine training, we would most likely underestimate the actual availability of routine abortion training in obstetrics and gynecology residency programs. In either case, however, routine training is offered by a higher proportion of respondents to our survey than to earlier surveys (Table 6). To further illuminate our results, it is noteworthy that an official on the ACGME’s Residency Review Committee for Obstetrics and Gynecology estimated that in 1997, 35% of residents completing their fourth year of training in obstetrics and gynecology had not performed a single abortion.<sup>13</sup>

Program directors were asked to specify whether first- and second-trimester abortion training was routine or elective in their residency programs, but the survey did not specifically define these two terms. Thus, respondents may have crafted their own definitions of “abortion training,” “routine” and “elective,” on the basis of their political and academic situations and understandings. Pressure to affirm the presence of abortion training in residency programs may come from the new ACGME standard, which links abortion training with accreditation. No residency program could lose its accreditation simply because it does not offer abortion training; however, program directors may have exaggerated the existence and routine nature of abortion training, especially if they are under the misapprehension that NAF is a political watchdog organization.

It is also possible that program directors’ perspectives on the availability of abortion training may not match the perspectives of residents. Our study did not assess residents’ perceptions of either the availability of abortion training or faculty’s expectations about their participation in it. However, an earlier survey that gathered data from both program directors and residents found that residents consistently reported less clinical experience than did their program directors.<sup>14</sup> A similarly designed study revealed that program directors also reported more “verbal instruction” than did the chief resident.<sup>15</sup> Thus, even in the absence of reporting bias on the part of residency program directors, abortion training may not be as available as our data suggest if discrepancies exist between program directors’ and residents’ perceptions.

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**Table 6. Percentage distribution of obstetrics and gynecology residency programs, by availability of first-trimester abortion training, according to year of survey**

| Year          | Offered routinely | Offered as elective | Not offered† | Total |
|---------------|-------------------|---------------------|--------------|-------|
| 1998          |                   |                     |              |       |
| Assumption A  | 46                | 34                  | 19           | 100   |
| Assumption B‡ | 31                | 23                  | 44           | 100   |
| 1992          | 12                | 58                  | 30           | 100   |
| 1985          | 23                | 50                  | 28           | 100   |

†Includes programs where residents may obtain training elsewhere. ‡Percentages do not add to 100 because some respondents did not indicate whether training is routine or elective. Notes: Under assumption A, nonrespondents offer abortion training at the same rate as respondents. Under assumption B, all nonrespondents, who make up 31% of the survey universe, do not offer abortion training. Sources: 1992—MacKay HT and MacKay AP, 1995 (reference 1); 1985—Darney PD et al., 1987 (reference 1).

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### Conclusions

We are cautiously optimistic that more obstetrics and gynecology residents have access to abortion training than did in 1992. Residents who have experience with abortion are more likely than others to have a positive attitude toward it and to discuss all pregnancy options with their patients.<sup>16</sup> Yet, fewer than half of the responding programs report offering routine abortion training to the next generation of women's reproductive health care providers. It is not enough for training to be available on an elective basis to overworked residents. Programs need to set expectations of resident participation in routine abortion training so that trainees who exercise a conscience clause provision to opt out become the exception and not the rule. Our data confirm that when programs clearly expect resident participation in routine abortion training, residents are more likely to receive training.<sup>17</sup>

Some 27% of respondents train their residents in abortion techniques exclusively within the hospital's operating room, even though it is well established that hospitals, especially those that provide only medically indicated abortions, perform very few abortions.<sup>18</sup> Given the low rate of complications following abortions, the adequacy of training and the competence of trainees to perform safe abortions may be questioned if "routine" training has taken place within such limited parameters.

If residents do not have access to training in abortion care, they are unable to provide a procedure that an estimated 43% of U.S. women will undergo by 45 years of age;<sup>19</sup> moreover, they are not well prepared to offer women accurate medical information on all of their pregnancy options. Residency programs have the potential to prepare the next generation of obstetrician-gynecologists to provide the care that their patients may need by communicating the importance of abortion as a part of the full range of reproductive health care within the specialty. Programs can accomplish this goal by integrating abortion training into their core curricula, setting clear expectations that all residents will participate in training and ensuring that residents are exposed to sufficient training opportunities to guarantee competence.

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